

Notice of Allowability

Application No.

10/729,055

Examiner

Madeline Gonzalez

Applicant(s)

VOELLER ET AL.

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2859

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 23 January 2004.
2. ☒ The allowed claim(s) is/are 23-30.
3. ☒ The drawings filed on 05 December 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

Claim 23 is allowed because the prior art of record does not show or suggest a method for measuring at least one vehicle wheel alignment angle from a vehicle wheel hub assembly including the steps of: calculating an offset angle using first and second measurements of at least one alignment angle, said offset angle representative of an angle variation between a wheel-mounted sensor angle measurement and a vehicle wheel hub assembly-mounted sensor angle measurement, and subtracting said calculated offset angle from at least one predetermined specification value for said at least one alignment angle to offset said specification value, wherein one or more subsequent vehicle wheel hub assembly-mounted sensor angle measurements of said at least one alignment angle may be compared with said offset specification value to determine a required wheel alignment adjustment, in combination with the remaining limitations in the claim.

Claim 24 is allowed because the prior art of record does not show or suggest a method for measuring at least one vehicle wheel alignment angle from a vehicle wheel hub assembly including the steps of: calculating an offset angle using a wheel-off measurement of at least one alignment angle and at least one subsequent wheel-off measurement, said offset angle representative of an angle alteration to said at least one alignment angle, and utilizing said calculated offset angle to determine a necessary alignment angle adjustment, in combination with the remaining limitations in the claim.

Claims 25-27 are allowed due to their dependency on claim 24.

Claim 28 is allowed because the prior art of record does not show or suggest a method for measuring at least one vehicle wheel alignment angle from a vehicle wheel hub assembly including the steps of: calculating an offset angle representative of an angle variation between an angle measurement acquired by a sensor coupled to a wheel rim and tire assembly and an angle measurement acquired by said sensor coupled to said wheel hub assembly, and utilizing said calculated offset angle to present angle measurements acquired by said sensor coupled to said wheel hub assembly to an operator in such a manner so as to appear as if obtained by a sensor coupled to said wheel rim and tire assembly, in combination with the remaining limitations in the claim.

Claim 29 is allowed because the prior art of record does not show or suggest a method for adjusting at least one vehicle wheel alignment angle on a vehicle including a wheel rim and tire assembly secured to a wheel hub assembly, including the steps of: calculating an offset angle between first and second measurements of at least one alignment angle, utilizing said offset angle with said second measurement and any subsequent measurements of said at least one alignment angle obtained by a wheel alignment sensor coupled to an adapter to obtain a current representative measurement of said vehicle wheel alignment angle, and utilizing said current representative measurement of said vehicle wheel alignment angle to facilitate guiding an

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operator in adjusting said at least one alignment angle, in combination with the remaining limitations in the claim.

Claim 30 is allowed because the prior art of record does not show or suggest a method for adjusting at least one vehicle wheel alignment angle on a vehicle including a wheel rim and tire assembly secured to a wheel hub assembly, including the steps of: calculating an offset angle between first and second measurements of at least one alignment angle, utilizing said offset angle to obtain a corrected measurement for said at least one alignment angle, and comparing a predetermined specification value for said at least one alignment angle with said corrected measurement for said at least one alignment angle to identify a necessary alignment angle adjustment required to alter said alignment angle, in combination with the remaining limitations in the claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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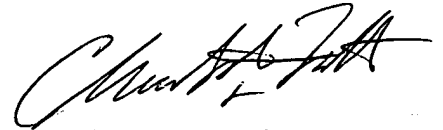
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeline Gonzalez whose telephone number is (571) 272-2243.

The examiner can normally be reached on Monday-Friday (8:00-5:30), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MG



Diego F.F. Gutierrez
Supervisory Patent Examiner
Technology Center 2800

CHRISTOPHER W. FULTON
PRIMARY EXAMINER